DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018542 Address: 333 Burma Road **Date Inspected:** 05-Dec-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Mr. Wang li yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY-1

This QA Inspector Randomly observed the following work in progress:

Flux Cored Arc Welding (FCAW) of weld joint E2-SB1-058-027~031. Welder is identified as 068494. ZPMC Quality Control (QC) is identified as Mr. Xiang feng feng. The welding variables appeared to comply with the Applicable WPS: WPS-B- T-2132-ESAB.

FCAW of weld joint E2-SB1-033-057~062. Welder is identified as 215082. ZPMC Quality Control (QC) is identified as Mr. Xiang feng feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2132-ESAB.

FCAW of weld joint E2-SB1-026-027~031. Welder is identified as 055564. ZPMC Quality Control (QC) is identified as Mr. Xiang feng feng. The welding variables appeared to comply with the Applicable WPS: WPS-B-T- 2132-ESAB.

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BAY-2

FCAW of weld joint SA3409-001-038,039. Welder is identified as 045209. ZPMC Quality Control (QC) is identified as Mr. Zhulin. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2232-ESAB.

During random in process inspection of OBG member identified as FB3343A, this QA observed 3 No's of an arc strikes on Piece Mark (PCMK) identified as X4953A. This QA marked the affected areas and informed ZPMC Quality Control (QC) indentified as Mr. Zhulin of this issue. Mr. Zhulin informed this QA that the arc strikes would be corrected in a manner compliant with the contract documents. Refer the attached photos for reference.

ZPMC personnel heat straightening OBG member identified as SA3450A. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Zhu jun was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) HSR1 (B)-9880.

ZPMC personnel heat straightening OBG member identified as \$A3451A. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. Zhu jun was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) HSR1 (B)-9797.

FCAW of weld joint AH3151-050. Welder is identified as 067036. ZPMC Quality Control (QC) is identified as Mr. Zhng yaxu. The welding variables appeared to comply with the Applicable WPS: WPS-B-T-2231-ESAB.

This QA Inspector performed photo documentation on Lift 14 Hinge plates are identified as FB3343A,SA3325A, FB3273A,FB3327A,SA3409A,FB3328A,SA3410A located in sub assembly bay 2 and 3. These photos has been sent to QA lead Inspector and Structural Material Representative (SMR) by mail.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





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Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer